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Atty. Docket No.: 741124-76

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
Hans-Jurgen LIENESCH et al.)
Serial No.: 09/780,379)
Filed: February 12, 2001)
For: BODY TO BE BONDED TO A)
MACHINE HOUSING)
(As Amended)

Examiner: Unassigned

Group Art Unit: 1772

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D. C. 20231

RECEIVED
SEP 24 2001
TC 1700

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE TITLE:

Please amend the title to read as follows:

--BODY TO BE BONDED TO A MACHINE HOUSING--.

IN THE SPECIFICATION:

Please amend the specification as follows:

Please note that the specification is presented below in its amended form. It is further presented as an Attachment to the Amendment whereby the amendments to the specification are outlined using the conventional method of bracketing and underlining.

On page 1, delete paragraph one, lines 1-3.

On page 1, before paragraph two, insert new paragraphs as follows:

Cross-Reference To Related Applications

This application is a divisional of United States Patent Application Serial No. 09/262,559, filed on March 3, 1999, now abandoned; which is a divisional application of United States Patent Application Serial No. 08/894,107 filed August 12, 1997 now abandoned, which is the United States National Stage of PCT International Application No. PCT/EP95/04939, filed on December 13, 1995, and claims priority from the PCT application under 35 U.S.C. §119.

BACKGROUND OF THE INVENTION

Field of the Invention

On page 2, substitute paragraph 5, starting at line 16-19 as follows:

The aforementioned problem will be solved for one part by providing a design of the metallic body to be bonded in accordance with an embodiment of the present invention and for another part by the specific creation or design of the adhesive connection between such body and the housing of a machine in accordance with an embodiment of the present invention.

On page 2, substitute paragraph 6, starting at line 20 through page 3, line 3 as follows:

The characteristics of an embodiment of the present invention will assure, that an adhesive (or glue) which is supplied in a sufficient amount between metallic body and the housing of a machine will not only be distributed reliably about the adhesion surface while the metallic body and the housing of the machine will be made to rotatably approach each other. Moreover, the adhesive will also be drawn into the region of an undercut direct adjacent to the adhesion surface, in a claw-giving fashion, onto the dorsal (back) side of the wedge shaped form (of the undercut). This will produce an especially strong connection between a housing of a machine and the metallic body once the adhesive has cured. A prerequisite for this kind of connection is, that the amount of adhesive that is supplied to a body designed according to claim 1 and a housing of a machine, will be more than an amount that would be sufficient only to cover the adhesion surfaces. Also, the metallic body will have to approach the housing of a machine in a rotating way about an axis of rotation that is

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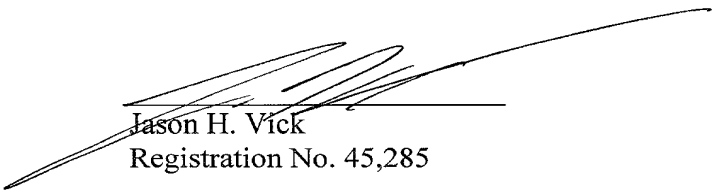
undercut portion forming a shoulder and an acute, wedge-shaped edge with the periphery of said adhesion surface, said wedge-shaped edge oriented to face away from said adhesion surface and to oppose said shoulder.—

REMARKS

Claims 1-10 are pending in the application. By this Amendment, claim 1 is amended, and new claims 2-10 are added. Prompt and favorable consideration is requested. Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

NIXON PEABODY LLP



Jason H. Vick
Registration No. 45,285

8180 Greensboro Drive
Suite 800
McLean, Virginia 22102
Telephone (703) 790-9110

Version with Markings to Show changes Made

On page 1, delete paragraph one, lines 1-3 as follows:

[Body to be Bonded to a Machine Housing and Adhesive Connection Between an Adhesion Surface of a Body and a Corresponding Adhesion Surface on the Outside of a Machine Housing].

On page 1, before paragraph two, insert new paragraphs as follows:

Cross-Reference To Related Applications

This application is a divisional of United States Patent Application Serial No. 09/262,559, filed on March 3, 1999, now abandoned; which is a divisional application of United States Patent Application Serial No. 08/894,107 filed August 12, 1997 now abandoned, which is the United States National Stage of PCT International Application No. PCT/EP95/04939, filed on December 13, 1995, and claims priority from the PCT application under 35 U.S.C. §119.

BACKGROUND OF THE INVENTION

Field of the Invention

On page 2, substitute paragraph 5, starting at line 16-19 as follows:

The aforementioned problem will be solved for one part by providing a design of the metallic body to be bonded in accordance with [claim 1] an embodiment of the present invention and for another part by the specific creation or design of the adhesive connection between such body and the housing of a machine in accordance with [claim 9] an embodiment of the present invention.

On page 2, substitute paragraph 6, starting at line 20 through page 3, line 3 as follows:

The characteristics of [claim 1] an embodiment of the invention will assure, that an adhesive (or glue) which is supplied in a sufficient amount between metallic body and the housing of a machine will not only be distributed reliably about the adhesion surface while the metallic body and the housing of the machine will be made to rotatably approach each other. Moreover, the adhesive will also be drawn into the region of an undercut direct adjacent to the adhesion surface, in a claw-giving fashion, onto the dorsal (back) side of the wedge shaped form (of the undercut). This will produce an especially strong connection between a housing of a machine and the metallic body once the adhesive has cured. A prerequisite for this kind of connection is, that the amount of adhesive that is supplied to a body designed according to [claim 1] an embodiment of the invention and a housing of a machine, will be more than an amount that would be sufficient only to cover the adhesion surfaces. Also, the metallic body will have to approach the housing of a machine in a rotating way about an axis of rotation that is perpendicular to the adhesion surface, preferably about ca. the central longitudinal axis of the metallic body.

On page 3, before paragraph 9, insert as follows:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

1. (Amended) A metallic body, to be bonded to the outside of a housing of a machine, especially a vibrating machine, [in particular the] said metallic body comprising [constituting] a housing or shell of a sensor, [which] said sensor [is] capable of converting a physical quantity, in particular a physical quantity related to one or more aspects of mechanical vibration, into a corresponding electrical signal, or said [the] metallic body comprising [in particular constituting] an adaptor for attaching said sensor to the housing of the [a] machine, said [the] body further comprising [exhibiting] a substantially flat adhesion surface, characterized in that said [, that the] adhesion surface is adapted to accept a layer of adhesive thereon and is provided with [adjoined or supplemented, towards a central volume part of the body, by] an undercut portion which forms a shoulder and an [a] acute, wedge-shaped edge with the periphery of said [the] adhesion surface, said wedge-shaped edge oriented to face away from said adhesion surface and to oppose said shoulder.

perpendicular to the adhesion surface, preferably about ca. the central longitudinal axis of the metallic body.

On page 3, before paragraph 9, insert as follows:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

IN THE CLAIMS:

Please amend claim 1 as follows:

Please note that claim 1 is presented below in its amended form. It is further presented as an Attachment to the Amendment whereby the amendments to the claim is outlined using the conventional method of bracketing and underlining.

1. (Amended) A metallic body, to be bonded to the outside of a housing of a machine, especially a vibrating machine, said metallic body comprising a housing or shell of a sensor, said sensor capable of converting a physical quantity, in particular a physical quantity related to one or more aspects of mechanical vibration, into a corresponding electrical signal, or said metallic body comprising an adaptor for attaching said sensor to the housing of the machine, said body further comprising a substantially flat adhesion surface, characterized in that said adhesion surface is adapted to accept a layer of adhesive thereon and is provided with an undercut portion which forms a shoulder and an acute, wedge-shaped edge with the periphery of said adhesion surface, said wedge-shaped edge oriented to face away from said adhesion surface and to oppose said shoulder.

Please add new claims 2-7 as follows:

--2. Body according to claim 1, characterization in that from out of said adhesion surface at least near the center of said surface, a stud extends perpendicular to said surface, said stud insertible into a hole or bore which extends from an opposite adhesion surface of the housing of the machine at least near the center of the opposite adhesion surface perpendicularly into the housing of the machine, and which stud is provided with a thread for thread-grooving interaction with a wall of said hole or bore.

3. Body according to claim 1, characterized by a hole or bore situated at least near the center of said adhesion surface of said body and extending perpendicularly into said body.

4. Body according to claim 2, characterized in that said stud is removably inserted into said hole or bore of the adhesion surface of said body.

5. Body according to claim 2, in that the cross-section of said thread-grooving stud shows the shape of a polygon.

6. Body according to claim 1, characterized by a group of grooves formed into the adhesion surface of said body for improving the bonding strength between the layer of adhesive and said adhesion surface.

7. Body according to claim 6, characterized by grooves from the group of grooves on said adhesion surface of said body, said grooves having shapes of arcs and have intersection points in common.

8. Body according to claim 6, characterized by grooves from the group of grooves on said adhesion surface of said body, said grooves exhibiting curvatures corresponding to arcs of circles.

9. A body adapted to be attached to a surface, said body comprising a substantially flat adhesion surface, said adhesion surface comprising a group of grooves formed into said adhesion surface, said grooves adapted to improve the strength of a bond between an adhesive material and said adhesion surface, said body further comprising an undercut portion forming an acute, wedge-shaped edge towards a central volume part of the body with the periphery of said adhesion surface.

10. A body adapted to be bonded to the outside of a housing of a machine, said body comprising a substantially flat adhesion surface provided with an undercut portion, said